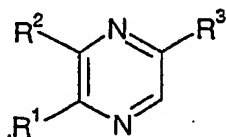


Claims

1. A compound of formula (I)



wherein  $R^1$  and  $R^2$  independently represent phenyl, thienyl or pyridyl each of which is independently optionally substituted by one or more groups represented by Z;

Z represents a  $C_{1-8}$ alkyl group, a  $C_{1-6}$ alkoxy group, hydroxy, halo, trifluoromethyl, trifluoromethylthio, trifluoromethoxy, trifluoromethylsulphonyl, nitro, mono or di  $C_{1-3}$ alkylamido,  $C_{1-3}$ alkylsulphonyl,  $C_{1-3}$ alkylsulphonyloxy,  $C_{1-3}$ alkoxycarbonyl, carboxy, cyano, carbamoyl, mono or di  $C_{1-3}$ alkyl carbamoyl, sulphamoyl, acetyl, an aromatic heterocyclic group, optionally substituted by halo, alkyl, trifluoromethyl or trifluoromethoxy and a saturated or partially unsaturated 5 to 8 membered heterocyclic group containing one or more heteroatoms selected from nitrogen, oxygen or sulphur wherein the heterocyclic group is optionally substituted by one or more  $C_{1-3}$ alkyl groups, hydroxy, fluoro, benzyl or an amino group  $-NR^xR^y$  in which  $R^x$  and  $R^y$  independently represent H or  $C_{1-4}$ alkyl;

$R^3$  represents a group of formula  $(CH_2)_nCOOR^7$

in which n is 0, 1, 2, 3 or 4 and  $R^7$  represents a  $C_{4-12}$ alkyl group, a  $C_{3-12}$ cycloalkyl group or a  $(C_{3-12}$ cycloalkyl) $C_{1-3}$ alkyl- group each of which is optionally substituted by one or more of the following: a  $C_{1-6}$ alkyl group; fluoro, amino or hydroxy, or

$R^7$  represents a group  $-(CH_2)_a$ phenyl in which  $a$  is 0, 1, 2, 3 or 4 and the phenyl group is optionally substituted by one or more groups represented by  $Z$  which may be the same or different or

5  $R^7$  represents a saturated or partially unsaturated 5 to 8 membered heterocyclic group containing one or more of the of the following: oxygen, sulphur or nitrogen; wherein the heterocyclic group is optionally substituted by one or more  $C_{1-3}$ alkyl groups,  $C_{1-3}$ acyl groups, hydroxy, amino or benzyl; or

10  $R^3$  represents a group of formula  $-(CH_2)_o-O-(CH_2)_p-R^8$  in which  $o$  represents an integer 1, 2, 3 or 4 and  $p$  represents an integer 0, 1, 2, 3 or 4 and  $R^8$  represents a  $C_{1-12}$ alkyl group optionally substituted by one or more of the following: a  $C_{1-6}$ alkyl group; fluoro, hydroxy, or an amino group  $-NR^xR^y$  in which  $R^x$  and  $R^y$  independently represent H or  $C_{1-4}$ alkyl;

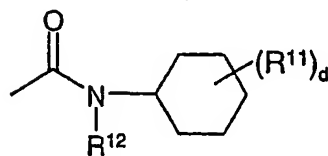
or  $R^8$  represents phenyl optionally independently substituted by one or more  $Z$  groups or

15  $R^8$  represents an aromatic heterocyclic group or a saturated or partially unsaturated 5 to 8 membered heterocyclic group containing one or more of one following: oxygen, sulphur or nitrogen wherein each of these rings is optionally substituted by one or more groups represented by  $Z$  which may be the same or different;

20  $R^3$  represents a group of formula  $-(CH_2)_qR^9$  in which  $q$  is 2, 3 or 4 and  $R^9$  represents a  $C_{3-12}$ cycloalkyl group, phenyl, an aromatic heterocyclic group or a saturated or partially unsaturated 5 to 8 membered heterocyclic group containing one or more of one following: oxygen, sulphur or nitrogen wherein each of these rings is optionally substituted by one or more groups represented by  $Z$  which may be the same or different; or

25  $R^3$  represents a group of formula  $-(CH_2)_m-O-(CO)-R^{10}$  in which  $m$  represents an integer 0, 1, 2, 3 or 4, and in which  $R^{10}$  represents a  $C_{1-12}$ alkyl group optionally substituted by one or more fluoro, hydroxy, or amino or  $R^{10}$  represents a group of formula  $-(CH_2)_qR^9$  in which  $q$  and  $R^9$  are as previously described; or

$R^3$  has the following formula:



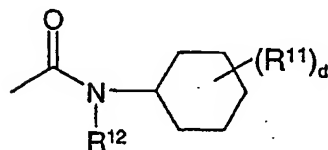
$R^{11}$  represents hydroxy, fluoro, carboxy, a  $C_{1-6}$ alkoxycarbonyl group or an amino group -  $NR^xR^y$  in which  $R^x$  and  $R^y$  independently represent H or  $C_{1-4}$ alkyl;

$d$  is 1, 2 or 3, and

$R^{12}$  represents H or a  $C_{1-3}$ alkyl group, or

$R^3$  represents a group of formula  $CONH-R^z$ , in which  $R^z$  is a piperidinyl ring substituted by a  $C_{1-6}$ alkanoyl group or  $R^3$  represents a group  $-COG$  in which  $G$  is a dihydroindole or a dihydroisoindole, linked through nitrogen to the carbonyl, and pharmaceutically acceptable salts thereof.

2. A compound according to claim 1, wherein  $R^3$  has the following formula:



$R^{11}$  represents hydroxy, fluoro, carboxy, a  $C_{1-6}$ alkoxycarbonyl group or an amino group -  $NR^xR^y$  in which  $R^x$  and  $R^y$  independently represent H or  $C_{1-4}$ alkyl;

$d$  is 1, 2 or 3,

$R^{12}$  represents H or a  $C_{1-3}$ alkyl group, and pharmaceutically acceptable salts thereof.

3. A compound according to any of the preceding claims, wherein  $R^1$  and  $R^2$  each represent phenyl independently optionally substituted by one or more chloro.

4. A compound according to any of the preceding claims, wherein  $R^3$  represents  $C_{4-12}$ alkoxycarbonyl.
5. A compound according to any of the preceding claims, wherein  $R^3$  represents a benzyloxymethyl group optionally substituted by Z in the phenyl ring of the benzyl group.
6. A compound according to any of the preceding claims, wherein  $R^3$  represents a group  $C(O)O$ -Het wherein Het is piperidino, morpholino or pyrrolidino.
- 10 7. A compound according to any of the preceding claims, wherein  $R^1$  and  $R^2$  each represent 4-chlorophenyl.
8. A compound according to any of the preceding claims, wherein d is 1 and  $R^{11}$  is hydroxyl, amino or a  $C_{1-6}$ alkoxycarbonyl group.
- 15 9. A compound according to any of the preceding claims, wherein d is 2 and  $R^{11}$  is F and both fluoros are attached to the same carbon on the cyclohexyl ring.
10. A compound according to any of the preceding claims, wherein  $R^{12}$  is H.
- 20 11. A compound according to any of the preceding claims, wherein the aromatic heterocyclic group is furyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, imidazolyl, pyrazolyl, oxazolyl thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazinyl or 1,3,5-triazenyl.
- 25 12. A compound according to any of the preceding claims, wherein the aromatic heterocyclic group is pyrrolyl, thienyl, imidazolyl, oxazolyl or pyridyl.

13. A compound according to any of the preceding claims, wherein the saturated or partially unsaturated 5 to 8 membered heterocyclic group is tetrahydrofuranyl, tetrahydropyranyl, pyrrolidinyl, morpholinyl, piperidinyl or piperazinyl,
- 5 14. A compound according to any of the preceding claims, wherein the saturated or partially unsaturated 5 to 8 membered heterocyclic group is tetrahydrofuran-3-yl, tetrahydropyran-4-yl, pyrrolidin-3-yl, morpholino, piperidino, piperidin-4-yl or piperazin-1-yl.
- 10 15. A compound selected from one or more of the following:  
5,6-bis(4-chlorophenyl)-*N*-(cis-2-hydroxypiperidin-1-yl)pyrazine-2-carboxamide,  
5,6-bis(4-chlorophenyl)-*N*-(trans-2-hydroxypiperidin-1-yl)pyrazine-2-carboxamide,  
5,6-bis(4-chlorophenyl)-*N*-(4-hydroxypiperidin-1-yl)pyrazine-2-carboxamide,  
5,6-bis(4-chlorophenyl)-*N*-(4,4-difluorocyclohexyl)pyrazine-2-carboxamide,  
15 *N*-(1-acetylpiperidin-3-yl)-5,6-bis(4-chlorophenyl)pyrazine-2-carboxamide,  
*Tert*-butyl 5,6-bis(4-chlorophenyl)pyrazine-2-carboxylate,  
5,6-Bis (4-chlorophenyl)-pyrazine-2-yl)-(1,3-dihydro-isoindol-2-yl)-methanone,  
2,3-bis(4-chlorophenyl)-5-[[ (4-fluorobenzyl)oxy]methyl]pyrazine,  
2,3- bis(4-chlorophenyl)-5-[(piperidine-1-yloxy)carbonyl]pyrazine, and  
20 pharmaceutically acceptable salts thereof.
16. A compound of formula I as claimed in any previous claim for use as a medicament.
17. A pharmaceutical formulation comprising a compound of formula I, as defined in any  
25 of the claims 1-15 and a pharmaceutically acceptable adjuvant, diluent or carrier.
18. Use of a compound of formula I according to any of the claim 1-15 in the preparation of a medicament for the treatment or prophylaxis of obesity, psychiatric disorders such as psychotic disorders, schizophrenia and bipolar disorders, anxiety, anxio-depressive  
30 disorders, depression, cognitive disorders, memory disorders, obsessive-compulsive disorders, anorexia, bulimia, attention disorders, epilepsy, and related conditions, and

neurological disorders such as dementia, neurological disorders, Parkinson's Disease, Huntington's Chorea and Alzheimer's Disease, immune, cardiovascular, reproductive and endocrine disorders, septic shock, diseases related to the respiratory and gastrointestinal systems, and extended abuse, addiction and/or relapse indications.

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19. A method of treating obesity, psychiatric disorders, psychotic disorders, schizophrenia and bipolar disorders, anxiety, anxio-depressive disorders, depression, cognitive disorders, memory disorders, obsessive-compulsive disorders, anorexia, bulimia, attention disorders, epilepsy, and related conditions, neurological disorders, neurological disorders,  
10 Parkinson's Disease, Huntington's Chorea and Alzheimer's Disease, immune, cardiovascular, reproductive and endocrine disorders, septic shock, diseases related to the respiratory and gastrointestinal system, and extended abuse, addiction and/or relapse indications, comprising administering a pharmacologically effective amount of a compound of formula I according to any of the claims 1-15 to a patient in need thereof.

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20. A compound as defined in any of the claims 1-15 for use in the treatment of obesity.